

Landing Gears: Opening Drill®

The customer manufactures landing gears made from 4340 alloy steel (269 Bhn) using a Mazak horizontal lathe with water soluble oil coolant. They were opening a 2.125" hole to 3.75".

To improve production, the customer needed to decrease the cycle time.

The **Opening Drill®** provided significant time savings. The cost per hole decreased beyond the customer's expectations.



Product: Opening Drill®

Objective: Decrease cycle time

Industry: Aerospace
Part: Landing Gears

Material: 4340 alloy steel, 269 Bhn

Hole Ø: 3.75" **Hole Depth:** 7.00"

Measure	Competitor Boring Bar	Opening Drill®
RPM	400	509
Feed Rate	0.012 IPR	0.004 IPR
Penetration Rate	4.8 IPM	2.04 IPM
Cycle Time	19 min	3 min 30 sec
Tool Life	30 parts	30 parts
Cost Per Hole	\$29.62	\$7.75

